

Abstract

A planar waveguide optical amplifier includes a substrate and an active waveguide formed on the substrate for imparting gain to an optical signal propagating therethrough. The active waveguide has an input port for receiving an optical signal to be amplified and an output port on which an amplified optical signal is directed. A plurality of coupling elements are formed on the substrate and are adapted to couple pump power to the active waveguide. The plurality of coupling elements are located at predetermined positions along the active waveguide.